

U.S. DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

Gott Road
Princeton, West Virginia



HS 298

February 26, 1979

MEMORANDUM FOR: JACK F. McMANUS
Subdistrict Manager

FROM: S. E. GASPERSICH
Coal Mine Safety Specialist

SUBJECT: Report on Investigation of Coal Mine Outburst,
Beatrice Mine, Beatrice Pocahontas Company, Keen
Mountain, Buchanan County, Virginia, February 8,
1979

RECEIVED
FEB 28 1979
Mr. E. S. A.
Richmonds, Virginia

A coal outburst occurred at 10:15 a.m., February 8, 1979, at the face of a split in a pillar about 65 feet west of survey station No. 8441 in No. 1 south section. Jimmie McGraw, continuous-mining machine operator, sustained general bruises when his machine was moved about 5 feet from the face by the force of the outburst; however, he was dismissed immediately after a medical examination. Cecil Keene, section foreman, had a severe headache for several minutes immediately after the outburst. The ripper assembly was damaged and separated from the continuous-mining machine and the oil tank on the shuttle car being loaded was displaced and caused leaks in the hydraulic oil system.

The writer was notified promptly after the accident while on an underground assignment in another mine. The investigation was started the same day and completed the following day.

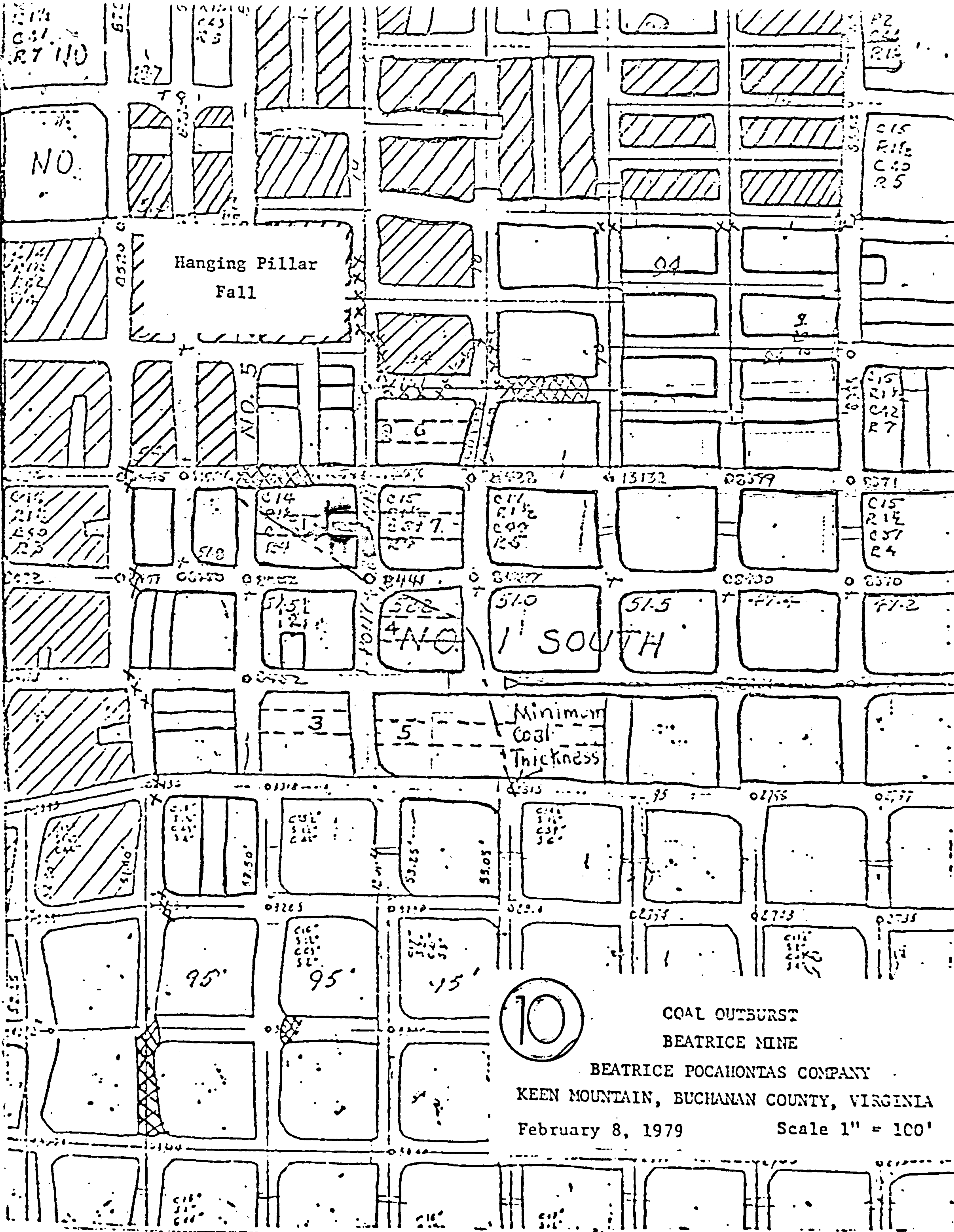
McGraw loaded three shuttle cars of coal to advance the split started by the previous production shift. The coal at the face was diminishing in thickness and Keene directed McGraw to "take bottom" before attacking the face again to maintain vertical clearance. McGraw loaded floor material and barely struck the face along the left rib when the outburst occurred. Daniel Wagner, continuous-mining machine operator's helper, was "in the clear" in accordance with accepted work habits in areas of bump potential; however, Keene was closely observing mining of the floor and had not retreated to a safe area when the machine contacted the face. Keene ascertained the safety of his crew and arranged for McGraw to be transported to the surface. Line brattice in the split was downed and had to be erected again to restore ventilation.

The investigation revealed that a considerable area of roof in the gob had not fallen and the coal thickness decreased 10 inches from the opening of the split to the face. These factors and the hard floor in this area led to the stress build-up that culminated in the outburst. Relatively little coal was ejected from the face; however, a void near the roof along the left side of the face was easily discernible.

This general area has been characterized by a strong floor which led to a plan to maintain small pillars along the pillar line. In view of the hanging pillar fall (see sketch) and strong floor revealed during development of the barrier pillar, it was planned to split the second row of large chain pillars outby the pillar line preparatory to resuming recovery of pillars. The outburst occurred during this phase of mining. In light of the marked undulation of the coalbed and the occurrence of the outburst, it was then planned to split the large pillars in the third row of pillars outby the pillar line with priority being given to the pillars containing the low coal (shown in sketch). Mining will be monitored closely to ascertain the effectiveness of this plan.

Attachment: a/s

cc: Herschel H. Potter



Hanging Pillar
Fall

Minimum
Coal
Thickness

10

COAL OUTBURST
BEATRICE MINE

BEATRICE POCAHONTAS COMPANY

KEEN MOUNTAIN, BUCHANAN COUNTY, VIRGINIA

February 8, 1979

Scale 1" = 100'